

Drug Policy:

Pegasys™ (peginterferon alfa-2a)

POLICY NUMBER UM ONC_1497	SUBJECT Pegasys™ (peginterferon alfa-2a)		DEPT/PROGRAM UM Dept	PAGE 1 OF 5
DATES COMMITTEE REVIEWED 04/10/24	APPROVAL DATE April 10, 2024	EFFECTIVE DATE April 26, 2024	COMMITTEE APPROVAL DATES 04/10/24	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
NCQA STANDARDS UM 2		ADDITIONAL AREAS OF IMPACT		
CMS REQUIREMENTS	STATE/FEDERAL REQUIREMENTS		APPLICABLE LINES OF BUSINESS Commercial, Exchange, Medicaid	

I. PURPOSE

To define and describe the accepted indications for Pegasys (peginterferon alfa-2a) usage in the treatment of cancer, including FDA approved indications, and off-label indications.

Evolent is responsible for processing all medication requests from network ordering providers. Medications not authorized by Evolent may be deemed as not approvable and therefore not reimbursable.

The use of this drug must be supported by one of the following: FDA approved product labeling, CMS-approved compendia, National Comprehensive Cancer Network (NCCN), American Society of Clinical Oncology (ASCO) clinical guidelines, or peer-reviewed literature that meets the requirements of the CMS Medicare Benefit Policy Manual Chapter 15.

II. INDICATIONS FOR USE/INCLUSION CRITERIA

A. Continuation requests for a not-approvable medication shall be exempt from this Evolent policy provided:

1. The member has not experienced disease progression on the requested medication **AND**
2. The requested medication was used within the last year without a lapse of more than 30 days of having an active authorization **AND**
3. Additional medication(s) are not being added to the continuation request.

B. Myelofibrosis (PMF)

1. Pegasys (peginterferon alfa-2a) may be used as first line or subsequent therapy for members with low-risk myelofibrosis.

Prognostic models for patients with PMF

Prognostic model	Risk groups and clinical relevance
IPSS⁸⁰	
Risk factors (weight):	Low risk: 0 (median survival, 11.3 y)
• Age >65 y (1 point)	Intermediate-1 risk: 1 point (7.9 y)
• Constitutional symptoms (1 point)	Intermediate-2 risk: 2 points (4.0 y)
• Hemoglobin <10 g/dL (1 point)	High risk: ≥3 points (2.3 y)
• WBC count >25 × 10 ⁹ /L (1 point)	IPSS estimates survival at the time of diagnosis
• Circulating blasts ≥1% (1 point)	
DIPSS⁸¹	
Risk factors (weight):	Low risk: 0 (median survival, >20 y)
• Age >65 y (1 point)	Intermediate-1 risk: 1-2 points (14.2 y)
• Constitutional symptoms (1 point)	Intermediate-2 risk: 3-4 points (4.0 y)
• Hemoglobin <10 g/dL (2 points)	High risk: 5-6 points (1.5 y)
• WBC count >25 × 10 ⁹ /L (1 point)	DIPSS can be applied anytime during clinical course
• Circulating blasts ≥ 1% (1 point)	
DIPSS-plus⁸³	
Risk factors (weight):	Low risk: 0 (median survival, 15 y)
• DIPSS score (DIPSS low = 0, DIPSS int-1 = 1 point, DIPSS int-2 = 2 points, DIPSS high = 3 points)	Intermediate-1 risk: 1 point (6.6 y)
• RBC transfusion need (1 point)	Intermediate-2 risk: 2-3 points (2.9 y)
• PLT count <100 × 10 ⁹ /L (1 point)	High risk: 4-6 points (1.3 y)
• Unfavorable karyotype* (1 point)	DIPSS-plus can be applied anytime during clinical course

C. Polycythemia Vera (PV)

1. Pegasys (peginterferon alfa-2a) may be used as first line or subsequent therapy for members with symptomatic low-risk polycythemia vera or high-risk polycythemia vera.

Table 5. Prognostic models for patients with PV

Prognostic model	Risk groups and clinical relevance
Conventional thrombosis score (European LeukemiaNet recommendations)⁷⁰	
At least 1 of the following risk factors:	Low risk: age <60 y AND no history of thrombosis, that is, no risk factors
• Age ≥60 y	High risk: age ≥60 y AND/OR history of thrombosis, that is, at least 1 risk factor
• Previous thrombosis	Low-risk patients are given low-dose aspirin and undergo regular phlebotomy to keep hematocrit <45%; high-risk patients are given also a cytoreductive treatment
IPSS for overall survival in PV⁷⁶	
Risk factors (weight):	Low risk: 0 (median survival, 28 y)
• Age ≥67 y (5 point)	Intermediate risk: 1-2 points (median survival, 19 y)
• Age 57-66 y (2 points)	High risk: ≥3 points (median survival, 11 y)
• Leukocyte count ≥15 × 10 ⁹ /L (1 point)	
• Previous venous thrombosis (1 point)	

D. Essential Thrombocythemia (ET)

1. Pegasys (peginterferon alfa-2a) may be used as subsequent therapy for members with intermediate/high-risk essential thrombocythemia.

Table 4. Prognostic models for patients with ET

Prognostic model	Risk groups and clinical relevance
Conventional score for prediction of vascular complications (European LeukemiaNet recommendations)⁷⁰	
At least 1 of the following risk factors:	
• Age ≥60 y	Low risk: age <60 y AND no history of thrombosis or major bleeding AND PLT count <1500 × 10 ⁹ /L, that is, none of the 3 major risk factors
• Previous thrombosis or major bleeding	High risk: age ≥60 y AND/OR history of thrombosis or major bleeding AND/OR PLT count ≥1500 × 10 ⁹ /L, that is, at least 1 of the 3 major risk factors
• PLT count ≥1500 × 10 ⁹ /L	While low-risk patients are just followed (observation alone) or given low-dose aspirin, high-risk patients are given a cytoreductive treatment plus low-dose aspirin
IPSET-thrombosis (International Prognostic Score for ET: estimates the risk of thrombosis)⁷¹	
Risk factors (weight):	Low risk: 0-1 point (probability of thrombotic events: 1.03% of patients/year)
• Age ≥60 y (1 point)	Intermediate risk: 2 points (2.35% of patients/year)
• Previous thrombosis (2 points)	High risk: ≥3 points (3.56% of patients/year)
• Cardiovascular risk factors* (1 point)	Potential therapeutic implications: (1) observation alone may be adequate in patients with no risk factors; (2) low-dose aspirin should be used in all patients with JAK2 (V617F) and/or cardiovascular risk factors; (3) older patients (≥60 y) without additional risk factors may not need a cytoreductive treatment; (4) conversely, a cytoreductive treatment may be considered in younger patients (<60 y) with JAK2-mutant ET and concomitant cardiovascular risk factors, even in the absence of previous thrombosis
• JAK2 (V617F) mutation (2 points)	
IPSET (International Prognostic Score for ET: predicts survival)⁷³	
Risk factors (weight):	Low risk: 0 (median survival not reached)
• Age ≥60 y (2 points)	Intermediate risk: 1-2 points (median survival, 24.5 y)
• Previous thrombosis (1 point)	High risk: 3-4 points (median survival, 13.8 y)
• Leukocyte count >11 × 10 ⁹ /L (1 point)	

*Cardiovascular risk factors include hypertension, diabetes, and active tobacco use.

III. EXCLUSION CRITERIA

- A. Disease progression while taking Pegasys (peginterferon alfa-2a).
- B. Concurrent use with other anticancer therapies.
- C. Dosing exceeds single dose limit of 180 mcg.
- D. Investigational use of Pegasys (peginterferon alfa-2a) with an off-label indication that is not sufficient in evidence or is not generally accepted by the medical community. Sufficient evidence that is not supported by CMS recognized compendia or acceptable peer reviewed literature is defined as any of the following:

1. Whether the clinical characteristics of the patient and the cancer are adequately represented in the published evidence.
2. Whether the administered chemotherapy/biologic therapy/immune therapy/targeted therapy/other oncologic therapy regimen is adequately represented in the published evidence.
3. Whether the reported study outcomes represent clinically meaningful outcomes experienced by patients. Generally, the definitions of Clinically Meaningful outcomes are those recommended by ASCO, e.g., Hazard Ratio of < 0.80 and the recommended survival benefit for OS and PFS should be at least 3 months.
4. Whether the experimental design, considering the drugs and conditions under investigation, is appropriate to address the investigative question. (For example, in some clinical studies, it may be unnecessary or not feasible to use randomization, double blind trials, placebos, or crossover).
5. That non-randomized clinical trials with a significant number of subjects may be a basis for supportive clinical evidence for determining accepted uses of drugs.
6. That case reports are generally considered uncontrolled and anecdotal information and do not provide adequate supportive clinical evidence for determining accepted uses of drugs.
7. That abstracts (including meeting abstracts) without the full article from the approved peer-reviewed journals lack supporting clinical evidence for determining accepted uses of drugs.

IV. MEDICATION MANAGEMENT

- A. Please refer to the FDA label/package insert for details regarding these topics.

V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

- A. None

VII. REFERENCES

- A. Pegasys prescribing information. Hoffmann-La Roche Inc. South San Francisco, CA. 2021
- B. Quintás-Cardama A, Abdel-Wahab O, Manshouri T, et al. Molecular analysis of patients with polycythemia vera or essential thrombocythemia receiving pegylated interferon α -2a. *Blood*. 2013;122(6):893-901. doi:10.1182/blood-2012-07-442012
- C. Silver RT, et al. The effect of initial molecular profile on response to recombinant interferon- α (rIFN α) treatment in early myelofibrosis. *Cancer*. 2017 Jul 15;123(14):2680-2687. doi: 10.1002/cncr.30679
- D. Kiladjian JJ, et al. Pegylated interferon- α 2a induces complete hematologic and molecular responses with low toxicity in polycythemia vera. *Blood*. 2008 Oct 15;112(8):3065-72. doi: 10.1182/blood-2008-03-143537
- E. Rumi E, Cazzola M. Diagnosis, risk stratification, and response evaluation in classical myeloproliferative neoplasms. *Blood*. 2017 February 9;129(6): 680-692. DOI 10.1182/blood-2016-10-695957
- F. Clinical Pharmacology Elsevier Gold Standard 2024.

- G. Micromedex® Healthcare Series: Micromedex Drugdex Ann Arbor, Michigan 2024.
- H. National Comprehensive Cancer Network. Cancer Guidelines and Drugs and Biologics Compendium 2024.
- I. Ellis LM, et al. American Society of Clinical Oncology perspective: Raising the bar for clinical trials by defining clinically meaningful outcomes. J Clin Oncol. 2014 Apr 20;32(12):1277-80.
- J. Medicare Benefit Policy Manual Chapter 15 Covered Medical and Other Health Services:
<https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/bp102c15.pdf>.